

AMENDMENTS TO THE CLAIMS:

Claim 60 is amended. The following is the status of the claims of the above-captioned application, as amended.

Claims 1-39 (Canceled).

Claim 40 (Previously presented). An isolated polypeptide having antimicrobial activity, comprising the amino acid sequence of SEQ ID NO: 1:

Gly Xaa Xaa Xaa Arg Xaa Xaa Xaa Lys Ile Xaa Xaa Lys Xaa Xaa Lys
5 10 15

Xaa Xaa Xaa Xaa Ile Lys Xaa Xaa Xaa Xaa Leu Val Pro (SEQ ID NO: 1);
20 25

wherein

Xaa at position 2 is Leu or Arg;
Xaa at position 3 is Leu, Val, Ile or Phe;
Xaa at position 4 is Arg or Lys;
Xaa at position 6 is Leu, Val, Ile or Phe;
Xaa at position 7 is Arg, Lys, Trp or Gly;
Xaa at position 8 is Lys, Arg, Gly, Met, Asn or Glu;
Xaa at position 11 is Gly, Arg, Lys or Glu;
Xaa at position 12 is Gly, Arg, Lys or Glu;
Xaa at position 14 is Leu or Phe;
Xaa at position 15 is Lys or Arg;
Xaa at position 17 is Ile, Leu, Phe, Cys or Tyr;
Xaa at position 18 is Gly, Ala or Thr;
Xaa at position 19 is Gln, Arg, Leu or Pro;
Xaa at position 20 is Lys, Ile, Met, Leu or Val;
Xaa at position 23 is Pro, Ala, His, Asn or Asp;
Xaa at position 24 is Ile or Leu;
Xaa at position 25 is Arg, His, Gln or Pro; and
Xaa at position 26 is Ile or Lys;

wherein each amino acid is independently the D or L form.

Claim 41 (Previously presented). The polypeptide of claim 40, wherein Xaa at position 3 is Leu or Phe.

Claim 42 (Previously presented). The polypeptide of claim 40, wherein Xaa at position 4 is Arg or Lys.

Claim 43 (Previously presented). The polypeptide of claim 40, wherein Xaa at position 6 is Leu or Phe.

Claim 44 (Previously presented). The polypeptide of claim 40, wherein Xaa at position 7 is Arg, Lys or Gly.

Claim 45 (Previously presented). The polypeptide of claim 40, wherein Xaa at position 8 is Lys, Arg or Glu.

Claim 46 (Previously presented). The polypeptide of claim 40, wherein Xaa at position 11 is Gly or Lys.

Claim 47 (Previously presented). The polypeptide of claim 40, wherein Xaa at position 12 is Lys, Arg or Glu.

Claim 48 (Previously presented). The polypeptide of claim 40, wherein Xaa at position 17 is Ile or Leu.

Claim 49 (Previously presented). The polypeptide of claim 40, wherein Xaa at position 18 is Ala or Thr.

Claim 50 (Previously presented). The polypeptide of claim 40, wherein
Xaa at position 3 is Leu or Phe;
Xaa at position 4 is Arg or Lys;
Xaa at position 6 is Leu or Phe;
Xaa at position 7 is Arg, Lys or Gly;
Xaa at position 8 is Lys, Arg or E;
Xaa at position 11 is Gly or Lys;

Xaa at position 12 is Lys, Arg or Glu;
Xaa at position 17 is Ile or Leu; and
Xaa at position 18 is Ala or Thr.

Claim 51 (Previously presented). The polypeptide of claim 40, which consists of the amino acid sequence of SEQ ID NO: 1.

Claim 52 (Previously presented). The polypeptide of claim 40, which comprises the amino acid sequence of SEQ ID NO: 3.

Claim 53 (Previously presented). The polypeptide of claim 40, which comprises the amino acid sequence of anyone of SEQ ID NOs: 4-8 and 10-57.

Claim 54 (Previously presented). A composition comprising a polypeptide of claim 40 and an additional biocidal agent.

Claim 55 (Previously presented). A detergent composition comprising a surfactant and a polypeptide of claim 40.

Claim 56 (Previously presented). An animal feed additive comprising

- (a) at least one polypeptide of claim 40; and
- (b) at least one fat soluble vitamin, and/or
- (c) at least one water soluble vitamin, and/or
- (d) at least one trace mineral, and/or
- (e) at least one macro mineral.

Claim 57 (Previously presented). The animal feed additive of claim 56, which further comprises phytase, xylanase, galactanase, and/or beta-glucanase.

Claim 58 (Previously presented). An animal feed composition having a crude protein content of 50 to 800 g/kg and comprising at least one polypeptide of claim 40.

Claim 59 (Previously presented). A method for killing or inhibiting growth of microbial cells comprising contacting the microbial cells with an effective amount of a polypeptide of claim 40.

Claim 60 (Currently amended). An isolated polypeptide having antimicrobial activity, comprising the amino acid sequence of SEQ ID NO: 1:

Gly Xaa Xaa Xaa Arg Xaa Xaa Xaa Lys Ile Xaa Xaa Lys Xaa Xaa Lys
5 10 15

Xaa Xaa Xaa (amino acids 1-19 of SEQ ID NO: 1);

wherein

Xaa at position 2 is Leu or Arg;
Xaa at position 3 is Leu, Val, Ile or Phe;
Xaa at position 4 is Arg or Lys;
Xaa at position 6 is Leu, Val, Ile or Phe;
Xaa at position 7 is Arg, Lys, Trp or Gly;
Xaa at position 8 is Lys, Arg, Gly, Met, Asn or Glu;
Xaa at position 11 is Gly, Arg, Lys or Glu;
Xaa at position 12 is Gly, Arg, Lys or Glu;
Xaa at position 14 is Leu or Phe;
Xaa at position 15 is Lys or Arg;
Xaa at position 17 is Ile, Leu, Phe, Cys or Tyr;
Xaa at position 18 is Gly, Ala or Thr; and
Xaa at position 19 is Gln, Arg, Leu or Pro;

wherein each amino acid is independently the D or L form.

Claim 61 (Previously presented). The polypeptide of claim 60, wherein Xaa at position 19 is Arg.

Claim 62 (Previously presented). The polypeptide of claim 61, wherein Xaa at position 3 is Leu or Phe.

Claim 63 (Previously presented). The polypeptide of claim 61, wherein Xaa at position 4 is Arg or Lys.

Claim 64 (Previously presented). The polypeptide of claim 61, wherein Xaa at position 6 is Leu or Phe.

Claim 65 (Previously presented). The polypeptide of claim 61, wherein Xaa at position 7 is Arg, Lys or Gly.

Claim 66 (Previously presented). The polypeptide of claim 61, wherein Xaa at position 8 is Lys, Arg or Glu.

Claim 67 (Previously presented). The polypeptide of claim 61, wherein Xaa at position 11 is Gly or Lys.

Claim 68 (Previously presented). The polypeptide of claim 61, wherein Xaa at position 12 is Lys, Arg or Glu.

Claim 69 (Previously presented). The polypeptide of claim 61, wherein Xaa at position 17 is Ile or Leu.

Claim 70 (Previously presented). The polypeptide of claim 61, wherein Xaa at position 18 is Ala or Thr.

Claim 71 (Previously presented). The polypeptide of claim 61, wherein
Xaa at position 3 is Leu or Phe;
Xaa at position 4 is Arg or Lys;
Xaa at position 6 is Leu or Phe;
Xaa at position 7 is Arg, Lys or Gly;
Xaa at position 8 is Lys, Arg or Glu;
Xaa at position 11 is Gly or Lys;
Xaa at position 12 is Lys, Arg or Glu;
Xaa at position 17 is Ile or Leu; and
Xaa at position 18 is Ala or Thr.

Claim 72 (Previously presented). The polypeptide of claim 61, which consists of the amino acid sequence of SEQ ID NO: 1.

Claim 73 (Previously presented). The polypeptide of claim 61, which comprises the amino acid sequence of anyone of SEQ ID NOs: 59-69.

Claim 74 (Previously presented). A composition comprising a polypeptide of claim 61 and an additional biocidal agent.

Claim 75 (Previously presented). A detergent composition comprising a surfactant and a polypeptide of claim 61.

Claim 76 (Previously presented). An animal feed additive comprising

- (a) at least one polypeptide of claim 61; and
- (b) at least one fat soluble vitamin, and/or
- (c) at least one water soluble vitamin, and/or
- (d) at least one trace mineral, and/or
- (e) at least one macro mineral.

Claim 77 (Previously presented). The animal feed additive of claim 76, which further comprises phytase, xylanase, galactanase, and/or beta-glucanase.

Claim 78 (Previously presented). An animal feed composition having a crude protein content of 50 to 800 g/kg and comprising at least one polypeptide of claim 61.

Claim 79 (Previously presented). A method for killing or inhibiting growth of microbial cells comprising contacting the microbial cells with an effective amount of a polypeptide of claim 61.

Claim 80 (Previously presented). An isolated polypeptide having antimicrobial activity, comprising the amino acid sequence of SEQ ID NO: 9.

Claim 81 (Previously presented). A composition comprising a polypeptide of claim 80 and an additional biocidal agent.

Claim 82 (Previously presented). A detergent composition comprising a surfactant and a polypeptide of claim 80.

Claim 83 (Previously presented). An animal feed additive comprising

- (a) at least one polypeptide of claim 80; and
- (b) at least one fat soluble vitamin, and/or
- (c) at least one water soluble vitamin, and/or
- (d) at least one trace mineral, and/or
- (e) at least one macro mineral.

Claim 84 (Previously presented). The animal feed additive of claim 83, which further comprises phytase, xylanase, galactanase, and/or beta-glucanase.

Claim 85 (Previously presented). An animal feed composition having a crude protein content of 50 to 800 g/kg and comprising at least one polypeptide of claim 80.

Claim 86 (Previously presented). A method for killing or inhibiting growth of microbial cells comprising contacting the microbial cells with an effective amount of a polypeptide of claim 80.